

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte TERRANCE J. DISHONGH, PRATEEK J. DUJARI,
BIN LIAN and DAMION T. SEARLS

Appeal No. 2004-0620
Application No. 09/698,898

ON BRIEF

Before FRANKFORT, McQUADE, and NASE, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 22, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to apparatus and methods for mounting electronic compounds to a substrate. In particular, the invention relates to a lead designed to secure jacks or sockets, which receive plug-in cables, to a printed circuit board (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art of record relied upon by the examiner in rejecting the appealed claims is:

Farnworth et al. (Farnworth)	5,940,277	Aug. 17, 1999
Lin et al. (Lin '558)	6,056,558	May 2, 2000
Lin et al. (Lin '348)	6,217,348	Apr. 17, 2001

The appellants' admission of prior art (specification, pages 1-3; Figures 9-11) relating to a surface mounted RJ45 connector assembly (Admitted Prior Art)

Claims 1 to 3, 5 to 9 and 11 to 13 stand rejected under 35 U.S.C. § 103 as being unpatentable over Farnworth in view of Lin '348.

Claims 4 and 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Farnworth in view of Lin '348 and the Admitted Prior Art.

Claims 14 to 22 stand rejected under 35 U.S.C. § 103 as being unpatentable over Farnworth in view of Lin '558.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 14, mailed June 4, 2003) for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 13, filed April 7, 2003) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 1 to 22 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531,

1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). When it is necessary to select elements of various teachings in order to form the claimed invention, we ascertain whether there is any suggestion or motivation in the prior art to make the selection made by the appellants. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the appellants' structure as a template and selecting elements from references to fill the gaps. See, for example, W. L. Gore and Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). The references themselves must provide some teaching whereby the appellants' combination would have been obvious. In re Gorman, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (citations omitted).

Claims 1 to 3, 5 to 9 and 11 to 13

In the rejection of claims 1 to 3, 5 to 9 and 11 to 13 under 35 U.S.C. § 103 as being unpatentable over Farnworth in view of Lin '348 (answer, pp. 4-5), the examiner (1) set forth that Farnworth discloses a lead (36, Fig. 5b) for attaching an electronic device (10) to a substrate (40), comprising a first lead portion (38) adapted to abut a side of the device, and a second lead portion (36) having a first surface adapted to attach to the substrate and having a second surface opposing the first surface; (2) set forth that Lin '348 discloses a lead comprising a second lead portion (53, Figure 3) including an arcuate structure extending from the second lead portion; (3) ascertained¹ that Farnworth does not disclose the second lead portion including an arcuate structure extending from the second lead portion; and (4) concluded that it would have been obvious to one skilled in the art to modify the second lead portion of Farnworth to include an arcuate structure extending from the second lead portion to accommodate a solder ball to improve the electrical connection between the lead and the electrical contact on the substrate as taught by Lin '348 (column 2, lines 40-45).

The appellants argue (brief, pp. 7-10) that the applied prior art does not suggest the claimed subject matter. We agree. In that regard, while Lin '348 does teach an

¹ After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

electrical connector assembly having a contact 5 including an arcuate receiving section 53, it is our opinion that Lin '348 would not have taught or suggested modifying the terminal contact end 36 of intermediate conductive element 35 of Farnworth to have an arcuate receiving section. As set forth above, teachings of references can be combined only if there is some motivation, suggestion or incentive to do so. Here, the applied prior art contains none. That is, there is no motivation or suggestion in the applied prior art for one skilled in the art at the time the invention was made to have modified Farnworth's terminal contact end 36 to include an arcuate receiving section. The disparate nature of the connectors of Farnworth and Lin '348 provide no suggestion for a person of ordinary skill in the art at the time the invention was made to have modified Farnworth to arrive at the claimed subject matter. Lin '348 provides the arcuate receiving section to maintain a solder ball in position. However, there is no evidence that Farnworth utilized a solder ball to connect the terminal contact end 36 to the corresponding terminal on the substrate. As such, there is no motivation, teaching or suggestion in the applied prior art to have modified Farnworth to arrive at the claimed subject matter.

For the reasons set forth above, the decision of the examiner to reject claims 1 to 3, 5 to 9 and 11 to 13 under 35 U.S.C. § 103 is reversed.

Claims 4 and 10

We have also reviewed the Admitted Prior Art additionally applied in the rejection of dependent claims 4 and 10 but find nothing therein which makes up for the deficiencies of Farnworth and Lin '348 discussed above. Accordingly, the decision of the examiner to reject claims 4 and 10 under 35 U.S.C. § 103 is also reversed.

Claims 14 to 22

In the rejection of claims 14 to 22 under 35 U.S.C. § 103 as being unpatentable over Farnworth in view of Lin '558 (answer, pp. 6-7), the examiner (1) set forth that Farnworth discloses an electronic assembly comprising an inherent method including providing a lead having a first portion and a second portion, the first portion being adapted to abut a side of a device, and the second portion having a first surface and an opposing second surface; (2) set forth that Lin '558 discloses a lead comprising an arcuate structure extending from the second surface of the lead (Fig. 5); (3) ascertained that Farnworth does not disclose forming an arcuate structure extending from the second lead surface; and (4) concluded that it would have been obvious to one skilled in the art to modify the second lead portion of Farnworth to include an arcuate structure extending from the second lead portion to accommodate a solder ball to improve the electrical connection between the lead and the electrical contact on the substrate as taught by Lin '558 (column 2, lines 19-24 and lines 36-38).

The appellants argue (brief, pp. 11-14) that the applied prior art does not suggest the claimed subject matter. We agree. In that regard, while Lin '558 does teach an electrical connector having a terminal 5' including an arcuate plate 53', it is our opinion that Lin '558 would not have taught or suggested modifying the terminal contact end 36 of intermediate conductive element 35 of Farnworth to have an arcuate plate. There is no motivation or suggestion in the applied prior art for one skilled in the art at the time the invention was made to have modified Farnworth's terminal contact end 36 to include an arcuate plate. The disparate nature of the connectors of Farnworth and Lin '558 provide no suggestion for a person of ordinary skill in the art at the time the invention was made to have modified Farnworth to arrive at the claimed subject matter. Lin '558 provides the arcuate plate to maintain a solder ball in position. However, there is no evidence that Farnworth utilized a solder ball to connect the terminal contact end 36 to the corresponding terminal on the substrate. As such, there is no motivation, teaching or suggestion in the applied prior art to have modified Farnworth to arrive at the claimed subject matter.

For the reasons set forth above, the decision of the examiner to reject claims 14 to 22 under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 to 22 under 35 U.S.C. § 103 is reversed.

REVERSED

CHARLES E. FRANKFORT
Administrative Patent Judge

JOHN P. McQUADE
Administrative Patent Judge

JEFFREY V. NASE
Administrative Patent Judge

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